

IN THE CLAIM

There is no amendment to the claims.

1 1. (Original) A method for allowing a device to be removably attached to a computer  
2 system while maintaining the system integrity, comprising the steps of:  
3 configuring a bridge between the device and the computer system; wherein  
4 while in an attached state  
5 if recognizing that the device has been removed from the  
6 bridge, then the bridge transitioning into a cleanup  
7 state, then a removed state;  
8 while in the cleanup state, performing the ordered steps of  
9 the bridge sending a first signal to the computer system;  
10 in response to the first signal, the computer system sending  
11 a second signal to the bridge; and  
12 in response to the second signal, the bridge sending a third  
13 signal to the computer system to indicate that the  
14 bridge has been removed from the computer system;  
15 removing the device from the bridge is performed without giving  
16 prior notice to the bridge, nor the computer system;  
17 the attached state indicating that the device has been attached to the  
18 computer system; and  
19 the removed state indicating that the device has been removed from  
20 the computer system.

1 2. (Original) The method of Claim 1 wherein the bridge using a first protocol to  
2 communicate with the computer system, and using a second protocol to  
3 communicate with the device.

1 3. (Original) The method of Claim 2 wherein the first protocol or the second protocol is:  
2 a protocol complying with the SCSI standard;  
3 a protocol complying with the IDE standard;  
4 a protocol complying with the fibre channel standard;  
5 a protocol complying with the IEEE 1394 standard; or  
6 a protocol complying with the USB standard.

1 4. (Original) The method of Claim 2 wherein the bridge includes a processing unit and  
2 memory to convert commands of the first protocol and the second protocol.

1 5.(Original) The method of Claim 2 wherein the first protocol is the same as the  
2 second protocol.

1 6. (Original) The method of Claim 1 wherein, while in the cleanup state, if the bridge  
2 receives a processing command, then the bridge sends a fourth signal to the  
3 computer system indicating that the bridge cannot process the command.

1 7. (Original) The method of Claim 6 wherein, while in the cleanup state, the bridge  
2 further sends a fifth signal to the computer system indicating that the command  
3 has been terminated.

1 8. (Original) The method of Claim 7 wherein, while in the cleanup state, the computer  
2 system, upon receiving the fourth or the fifth signal from the bridge, provides a  
3 sixth signal to indicate that the command cannot be processed.

1 9. (Original) The method of Claim 1 further comprising the step of providing a buffer  
2 between the device and the bridge for protecting the bridge from disruption signals  
3 from the device.

1 10. (Original) The method of Claim 1 further comprising the step of providing a buffer  
2 between the device and the bridge wherein the buffer prevents the signals passing  
3 from the device to the bridge.

1 11. (Original) The method of Claim 10 wherein the bridge transitioning to the cleanup  
2 state upon recognizing that the bridge cannot communicate with the device via the  
3 buffer.

1 12. (Original) The method of Claim 1 wherein:  
2 the bridge recognizes that the device has been removed from the bridge  
3 based on a signal asserted at a control pin of the bridge; and  
4 the signal changes when the control pin of the bridge is engaged to or  
5 disengaged from a control pin of the device.

1 13. (Original) A system for allowing a device to be removably attached to a computer  
2 system while maintaining the system integrity, comprising:  
3 a bridge interfacing between the device and the computer system;  
4 wherein

5                   while in an attached state  
6                   if recognizing that the device has been removed from the  
7                   bridge, then the bridge transitioning into a cleanup  
8                   state, then a removed state;  
9                   while in the cleanup state  
10                  the bridge sending a first signal to the computer system;  
11                  in response to the first signal, the computer system sending  
12                  a second signal to the bridge; and  
13                  in response to the second signal, the bridge sending a third  
14                  signal to the computer system to indicate that the  
15                  bridge has been removed from the computer system;  
16                  removing the device from the bridge is performed without giving  
17                  prior notice to the bridge, nor the computer system;  
18                  the attached state indicating that the device has been attached to the  
19                  computer system; and  
20                  the removed state indicating that the device has been removed from  
21                  the computer system.

1   14. (Original) The system of Claim 13 wherein the bridge using a first protocol to  
2                  communicate with the computer system, and using a second protocol to  
3                  communicate with the device.

1   15. (Original) The system of Claim 14 wherein the first protocol or the second protocol  
2                  is:  
3                  a protocol complying with the SCSI standard;  
4                  a protocol complying with the IDE standard;

- 5                   a protocol complying with the fibre channel standard;
- 6                   a protocol complying with the IEEE 1394 standard; or
- 7                   a protocol complying with the USB standard.

1   16. (Original) The system of Claim 13 wherein the bridge includes a processing unit and  
2                   memory to convert commands of the first protocol and the second protocol.

1   17. (Original) The system of Claim 13 wherein the first protocol is the same as the  
2                   second protocol.

1   18. (Original) The system of Claim 13 wherein, while in the cleanup state, if the bridge  
2                   receives a processing command, then the bridge sends a fourth signal to the  
3                   computer system indicating that the bridge cannot process the command.

1   19.(Original) The system of Claim 18 wherein, while in the cleanup state, the bridge  
2                   further sends a fifth signal to the computer system indicating that the command  
3                   has been terminated.

1   20.(Original) The system of Claim 19 wherein, while in the cleanup state, the computer  
2                   system, upon receiving the fourth or the fifth signal from the bridge, provides a  
3                   sixth signal to indicate that the command cannot be processed.

1   21. (Original) The system of Claim 13 further comprising a buffer between the device  
2                   and the bridge for protecting the bridge from disruption signals from the device.

1 22. (Original) The system of Claim 13 further comprising a buffer between the device  
2 and the bridge wherein the buffer prevents the signals passing from the device to  
3 the bridge.

1 23. The system of Claim 22 wherein the bridge transitions to the cleanup state upon  
2 recognizing that the bridge cannot communicate with the device via the buffer.

1 24. (Original) The system of Claim 13 wherein:  
2 the bridge recognizes that the device has been removed from the bridge  
3 based on a signal asserted at a control pin of the bridge; and  
4 the signal changes when the control pin of the bridge is engaged to or  
5 disengaged from a control pin of the device.

1 25. (Original) A method for hot removing a device from a system, comprising the steps  
2 of:  
3 configuring a bridge between the device and the system; and  
4 configuring a buffer between the device and the bridge for protecting the  
5 bridge from signals from the device; wherein  
6 while in an attached state  
7 if recognizing that the device has been removed from the  
8 bridge, then the bridge transitioning into a cleanup  
9 state, then a removed state;  
10 while in the cleanup state,  
11 the bridge sending a first signal to the system;  
12 in response to the first signal, the system sending a second  
13 signal to the bridge; and

14 in response to the second signal, the bridge sending a third  
15 signal to the system to indicate that the bridge has  
16 been removed from the system.